STS-110 POST LAUNCH FILM REVIEW KSC Photo/Video Analysis Team 10 April 2002

SIGNIFICANT ANOMALIES

None.

MINOR ANOMALIES

Two pieces of facility debris appears from under the raise deck adjacent to the SSME exhaust hole and near the LH2 TSM during SSME ignition. Shortly after T-0 the debris is blown across the MLP deck (away from the flight hardware) until it leaves the field of view. The debris appears to be two portions (1 to 3 foot in length) of either electrical cable or tygon tubing. (E-3)

FUNNIES

None.

OBSERVATIONS

No stud hang up were observed on any of the SRB hold-down posts.

SRB holddown post shoe rocked slightly on HDP's #1 and #6. (E-9, E-13) There was substantial holddown post shoe rock on HDP #2. (E-8)

GH2 vent line retraction appeared normal. No rebound observed from the pivot arm assembly. (E-41, E-42)

Small pieces of FSS facility debris enters field of view prior to T-0. No contact with vehicle. (E-42)

No OMS pod flexing observed. (E-17, E-18)

Deluge water pipe leaking near HDP 3. (E-7, E-10)

Two tile surface chips were noted from base heat shield. Largest one appeared between SSME #1 and #2. Tile surface coating loss was also observed from the aft face of the RH RCS stinger. This is a common occurrence due to SSME ignition acoustics.

Free-burning GH2 blown under body flap by wind during SSME ignition.

Several ice particles fell from ET/ORB umbilicals during SSME ignition.

Vapors on ET aft dome and SRB stiffener rings were observed after T-0.

Ice particles fell from LH2 / LO2 TSM T-0 disconnects.

Small particles of deck debris were blown across MLP deck.

SRB throat plug and water trough material ejected from exhaust hole. No contact with vehicle.

GO2 vent hood movement is visible after vehicle clears tower.

NOTES

All high speed film items have been reviewed.

No anomalies were observed in the films and videos that would be a concern for re-entry and landing.

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